

PATENT

Customer No. 22,852

Application No.: 09/402,796

Attorney Docket No. 05725.0481-00

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)
Christine DUPUIS	) Group Art Unit: 1617
Application No.: 09/402,796	) ) Examiner: L. Wells
Filed: December 22, 1999	)
For: COSMETIC COMPOSITION COMPRISING AT LEAST ONE NONIONIC AMPHIPHILIC ASSOCIATIVE POLYURETHANE AND AT LEAST ONE NONIONIC POLYMER WITH FATTY CHAINS	) ) ) ) )
Mail Stop Appeal BriefPatents Commissioner for Patents	)

#### APPEAL BRIEF UNDER BOARD RULE § 41.37

In support of the Notice of Appeal filed May 19, 2004, and further to Board Rule 41.37, Appellant presents this brief and enclose herewith a check for the fee of \$340.00 required under 37 C.F.R. § 41.20(b)(2).

This Appeal Brief is being filed concurrently with a petition for an Extension of Time for three months, and the appropriate fee.

This Appeal responds to the November 20, 2003, final rejection of claims 16-37.

If any additional fees are required or if the enclosed payment is insufficient,

Appellant requests that the required fees be charged to Deposit Account No. 06-0916.

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340.00 OP

#### I. Real Party In Interest

L'Oréal S.A. is the assignee of record.

#### II. Related Appeals and Interferences

There are currently no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### III. Status Of Claims

Claims 16-37 are pending in this application

Claims 16-37 have been finally rejected by the Examiner and Appellant appeals the rejection of those claims. The attached Appendix contains a clean copy of the claims involved in the appeal, *i.e.*, claims 16-37.

#### IV. Status Of Amendments

All amendments have been entered. No amendments under 37 C.F.R. § 1.116 have been filed.

#### V. Summary Of Claimed Subject Matter

The invention relates to cosmetic compositions comprising a novel system for thickening aqueous media based on associative polyurethanes and fatty-chain anionic polymers, as well as to their use as leave-in haircare gels or styling gels. Specification page 1, lines 4-8. The inventive composition comprises associative amphiphilic polyurethanes, *i.e.*, polymers comprising one or more hydrophilic portions which make them soluble in water, and one or more hydrophobic zones via which the polymers interact and assemble with each other or with other molecules, with anionic polymers comprising at least one fatty-chain monomer unit. Specification page 2, lines 9-14, and

page 3, lines 20-25. The inventive compositions as claimed comprise at least one amphiphilic associative polyurethane wherein the end capping groups are alkyl groups of differing, non-overlapping lengths. Specification page 5, lines 1-5.

The invention also relates to a process for thickening cosmetic compositions comprising the addition of at least one amphiphilic associative polyurethane wherein the end capping groups are alkyl groups of differing, non-overlapping lengths, and at least one fatty-chain monomer unit. Specification page 8, lines 15-18. It is known to prepare hair compositions in gel form using, as the thickening system, associative amphiphilic polymers in conjunction with surfactants. Specification page 2, lines 15-18. Without being bound by theory, it is thought that the advantageous rheological properties of the gels thus obtained are due to the formation of mixed micelles constituting a multitude of physical crosslinking points. Specification page 2 at lines 18-23. However, the presence of surfactants, even in small amounts, can adversely modify the cosmetic properties of the compositions, such as the properties of uniformity of application or of feel after drying. Specification page 2, line 24 to page 3, line 2.

The present inventive compositions result in a gel that has a very creamy texture and is pleasant to apply. The final feel on dried hair is more pleasant and less laden. In addition, the compositions have excellent styling power. Specification page 3, line 26 to page 4, line 2.

The present invention further relates to a cosmetic process for treating hair using a cosmetic composition comprising at least one nonionic associative polyurethane and at least one anionic polymer comprising at least one fatty-chain monomer unit.

Specification page 4, lines 13-18. The cosmetic process can comprise applying and evenly distributing the composition on the hair, and drying the hair thus treated without rinsing it. Specification page 10, lines 1-5.

#### VI. Grounds of Rejection

- A. Claim 21 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.
- B. Claims 16-23 and 25-37 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dupuis *et al.* (U.S. Patent No. 6,080,392) ("Dupuis") in view of Emmons et al. (U.S. Patent No. 4,155,892) ("Emmons") and in view of Huglin et al. (6,284,821) ("Huglin").
- C. Claim 24 stands rejected under 35 U.S.C. § 103(a) as being obvious over Dupuis *et al.* (U.S. Patent No. 6,080,392) ("Dupuis") in view of Emmons et al. (U.S. Patent No. 4,155,892) ("Emmons") and in view of Huglin et al. (6,284,821) ("Huglin") and further in view of Prencipe et al. (5,358,729) ("Prencipe").

#### VII. Grouping Of Claims

Each claim of this patent application is separately patentable, and upon issuance of a patent will be entitled to a separate presumption of validity under 35 U.S.C. § 282. For convenience in handling this Appeal, however, pending claims 16-37, stand or fall together.

#### VIII. Argument

A. The Examiner has failed to establish that claim 21 is indefinite under 35 U.S.C. § 112, second paragraph

In the Final Office Action dated November 20, 2003, ("Final Office Action") the Examiner rejects claim 21 under 35 U.S.C. § 112, second paragraph. Specifically, the Examiner alleges that the phrase "chemically, enzymatically or microbiologically modified" is "vague and indefinite, as its metes and bounds are unascertainable, as it is unknown what chemical, enzymatic or microbiologic modifications are, and what such a starch end product is." Final Office Action at 2. Appellant disagrees.

In Appellant's view, the Examiner has erroneously equated breadth with indefiniteness as evidenced by her statement of record that "one of ordinary skill in the art would not be able to ascertain what compounds are encompassed by this phrase, as this phrase encompasses an innumerable amount of chemical possibilities and hence, compounds." May 20, 2003, Office Action at 2-3. The number of compounds encompassed by "chemically, enzymatically or microbiologically modified soluble starch" is irrelevant in an analysis of definiteness under § 112, second paragraph. See M.P.E.P. § 2173.04. Because indefiniteness is not determined by breadth, what is relevant is "whether one of ordinary skill in the art would understand the bounds of the claim when read in light of the specification." Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 U.S.P.Q.2d. 1272, 1276 (Fed. Cir. 2001),. Moreover, "[s]ome latitude in the manner of expression . . . should be permitted" even if the claim language is not as precise as the Examiner might desire. M.P.E.P. § 2173.02



Appellant asserts that one of ordinary skill in the art would understand the phrase "a starch modified to be water soluble wherein said modification is carried out chemically, enzmatically, or microbiologically." In particular, the bounds of claim 21 are clear when read in light of the specification. See, for example, the specification at page 6, lines 9-15, stating that the "starch can be any starch extracted from natural sources, such as wheat starch, corn starch, rice starch, potato starch, etc., and which has been chemically, enzymatically, or microbiologically modified so as to be soluble in water."

Thus, as claim 21 states, the nonionic amphiphilic polyurethane of the presently claimed composition is in solution or suspension in water, and the water also comprises a starch that has been modified to be water-soluble. The modification is carried out by any of the standard procedures -- chemical reaction, enzymatic action, or via microbiological means. The definition of modified starch contained in *Hawley's Condensed Chemical Dictionary*, fourteenth ed., at page 1041, demonstrates how such a phrase is understood by one of ordinary skill in the art:

**starch, modified.** Any of several water-soluble polymers derived from a starch (corn, potato, tapioca) by acetylation, chlorination, acid hydrolysis, or enzymatic action. These reactions yield starch acetates, esters, and ethers in the form of stable and fluid solutions and films. . . .

As stated by the M.P.E.P., "[d]efiniteness of claim language must be analyzed, not in a vacuum, but in light of . . .[t]he claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." M.P.E.P. § 2173.02. Thus, for at least the reasons stated above, Appellant

respectfully submits that the claim language of claim 21 is definite, and requests the withdrawal of the Examiner's rejection.

# B. The Office has failed to establish a prima facie case of obviousness under 35 U.S.C. § 103(a)

In the Final Office Action dated November 20, 2003, ("Final Office Action") the Examiner rejects claims 16-37 over U.S. Patent No. 6,080,392 to Dupuis et al. (Dupuis I) in view of U.S. Patent No. 4,155,892 to Emmons et al. ("Emmons") and in view of U.S. Patent No. 6,284,821 to Hüglin et al. ("Hüglin"), and with respect to claim 24, further in view of U.S. Patent No. 5,385,729 to Prencipe et al. ("Prencipe"). Appellant maintains that a *prima facie* case of obviousness has not been established for the reasons of record and those set forth below.

In order to establish a *prima facie* case of obviousness, an Examiner must meet three basic criteria. First, the reference or references must teach or suggest <u>all</u> of the claim limitations. Second, the Examiner must demonstrate that there would have been some suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to modify or combine references; the evidence of this motivation to combine must be "clear and particular." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q. 1614, 1617 (Fed. Cir. 1999). Finally, the Examiner must demonstrate that there would have been a reasonable expectation of success in making such a modification or combination. *See* M.P.E.P. § 2143. In this case, the Examiner has failed to present references that teach all of the present claim

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limitations, even in combination. Moreover, the Examiner has not established that one of ordinary skill in the art would have been motivated to combine the teachings of the cited references to arrive at the presently claimed composition.

#### 1. **Dupuis I and Emmons**

Dupuis I teaches a cosmetic composition pressurized as an aerosol in the presence of a propellant and capable of forming a mousse, comprising, in a cosmetically acceptable medium, at least one associative polyurethane and at least one anionic polymer. Dupuis I does not teach or suggest a composition in the form of a gel, as required by the present claims. Furthermore, Dupuis I teaches a polymer having end groups R and R', which may be identical or different C<sub>8</sub>-C<sub>18</sub> hydrocarbon radicals. In contrast, in the presently claimed invention, one alkyl end group can have from 8 to 18 carbons while the other end group can have from 1 to 6 carbons. See, e.g., claim 16. As admitted by the Examiner, Dupuis I does not disclose or suggest one end group being an alkyl group having 1 to 6 carbons, nor does it teach or suggest a composition in the form of a gel. Final Office Action at 4. Moreover, Dupuis I does not teach, suggest or provide motivation to use end-capping groups of differing and nonoverlapping lengths.

The Examiner attempts to overcome the deficiencies of Dupuis I with secondary references. She first resorts to Emmons, asserting that Emmons, at Examples 97-102, "exempliffies] end-capping groups ranging from C4-C18." Final Office Action at 4. The Examiner asserts that the length of the hydrocarbon chain can be altered to obtain a preferred thickness, but offers no concrete citation for this asserted teaching. See May 20, 2003, Office Action at 4. The Examiner's combination of Dupuis I and Emmons thus does not establish a prima facie showing of obviousness for at least the following reasons.

First, Emmons does not overcome the deficiencies of Dupuis I because it does not suggest what is required by the present claims, i.e., "at least one . . . polyurethane of formula (I) . . . in which one of the radicals R<sub>1</sub> and R<sub>2</sub> is an alkyl group having 8 to 18 carbons and the other group is an alkyl group having 1 to 6 carbons." *See, e.g.,* claim 16. Specifically, (1) Examples 97-102 of Emmons do not use a polyurethane of formula (I); (2) the end-capping groups of 4-18 carbon atoms taught by Emmons, still does not teach the range of end-capping groups with 1-3 carbons; and (3) Emmons does not teach the use of different and non-overlapping end-capping groups, as is presently claimed.

Second, the Examiner has offered no reason or motivation to combine Dupuis I and Emmons. The disclosure of Emmons teaches the use of the thickeners almost entirely in latex paint compositions. The "suggestion" for use of the thickeners in "cosmetics and toiletries" is sandwiched between a long list of industrial and toxic uses such as "the paper, leather and textile industries, oil well flooding compositions and drilling muds, detergents, adhesives, waxes, . . . and pesticidal or agricultural compositions for the control of insects, rodents, fungi, parasites of all kinds, and undesirable plant growth." Emmons, col. 14, lines 63-68. Such a disclosure is hardly a motivation to consider combining any teaching within it with the cosmetic hair composition of Dupuis I.

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In response to this argument made by Appellant, the Examiner states that Emmons "exemplifies cosmetic compositions comprising polyurethane thickeners. Thus, it is unclear why Applicant is making such an argument." Final Office Action at 4. However, neither of the two Examples in Emmons that describe cosmetic compositions, Examples 280-281, contain the polyurethanes of Examples 97-102. That is, Emmons does not teach a cosmetic composition with a polyurethane thickener with end-capping groups of 4-20 carbons, which is the teaching for which the Examiner purports to rely on Emmons. A reference should be considered as a whole, and portions arguing against or teaching away from the claimed invention must also be considered. See Bausch & Lomb, Inc. v. Barnes Hind/Hydrocurve, Inc., 796 F.2d 443, 230 U.S.P.Q. 416 (Fed. Cir. 1986).

It would appear that the Examiner's arguments are tantamount to an improper obvious to try argument. See M.P.E.P. § 2145. As noted in the M.P.E.P., it is improper for the Examiner to argue obviousness where the prior art merely discloses a promising field of experimentation while providing "only general guidance as to the particular form of the claimed invention or how to achieve it." *Id.* (citing *In re O'Farrell*, 853 F.2d 894, 903, 7 U.S.P.Q.2d 1673, 1681 (Fed. Cir. 1988)). Moreover, the reference must direct those skilled in the art to the presently claimed invention without any need for picking, choosing, and combining various disclosures within the reference not directly related to each other by the teachings of the cited reference. *See In re Luvisi*, 342 F.2d 102, 106-107, 144 U.S.P.Q. 646, 649-50 (C.C.P.A. 1965) (Examiner's obviousness rejection based on a "needle-in-the-haystack" type of disclosure was found improper).

Thus, not only does the combination of the two references not teach all the claimed elements, but the Examiner also fails to point to any disclosures in Emmons that would suggest modifying the composition of Dupuis I. It is well-established law that the motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. See M.P.E.P. § 2143.01; see also In re Napier, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995). In order to support a rejection under 35 U.S.C. § 103, therefore, "the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). Using an applicant's disclosure as a blueprint to reconstruct the claimed invention from isolated pieces of the prior art references contravenes the statutory mandate of § 103, which requires determining obviousness at the time the invention was made. See Grain Processing Corp. v. American Maize-Prods. Co., 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, (Fed. Cir. 1988). Here, the Examiner has not and cannot point to any portion of Emmons that would suggest or motivate modifying the chain lengths of Dupuis I, such that one end group is an alkyl having 1 to 6 carbons and the other end group is an alkyl having 8 to 18 carbons, for use in cosmetic compositions. The Examiner simply has not provided the "clear and particular" evidence required to support the combination. See Dembiczak, 175 F.3d at 999, 50 U.S.P.Q.2d at 1617.

Without this evidence, the Examiner, therefore, cannot maintain that a person of ordinary skill in the art, having read the disclosure of Emmons, would have been motivated to reduce the length of only one end chain of a compound disclosed in Dupuis I, in the manner presently claimed. As such, the rejection should be withdrawn.

#### 2. Dupuis I, Emmons, and Hüglin

The present claims explicitly recite that the composition is in the form of a gel. The Examiner attempts to overcome the deficiencies of Dupuis I in combination with Emmons, specifically the mousse versus gel deficiency, by relying on Hüglin. According to the Examiner, it "would have been obvious to one of ordinary skill in the art at the time the invention was made to teach the composition of Dupuis in the form of a gel, as taught by Huglin [sic] et al. a) because Huglin [sic] et al. teach mousses and gels as interchangeable cosmetic hair-styling forms; and b) because of the expectation of achieving a composition that can be uniformly spread through the hair." May 20, 2003, Office Action at 5.

Appellant has argued to the Examiner that Hüglin does not teach a hair composition that can be both in the form of a mousse and a gel. Rather, Hüglin teaches a particular type of "stabilizer" compound, which can be used in various cosmetic forms. The compound taught in Hüglin in no way resembles formula (I) of the present invention. Thus, Hüglin does not suggest or motivate altering the composition of Dupuis I, comprising compounds of formula (IV), from mousse into gel form. Moreover, Hüglin does not remedy the deficiencies of the Examiner's attempted combination of Dupuis I and Emmons discussed above.

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The Examiner's response to Appellant's argument shows the Examiner's flawed logic. The Examiner admits that "Huglin is not relied upon to teach similar compounds to those taught by Dupuis [I] et al." Final Office Action at 4. The Examiner also admits that "Huglin is relied upon as a general cosmetic reference that teaches that it is known and conventional to interchange gel and mousse formulations in cosmetic formulations." 

Id. However, the Examiner ignores the fact that Hüglin teaches interchanging gel and mousse formulations with the aid of a stabilizer that is not in Dupuis I and Emmons.

Thus, the Examiner's statements are not supported by any showing of motivation, and thus the rejection is improper. The fact that the Examiner asserts that "Huglin teaches that it is conventional in the art to formulate cosmetic hair compositions for styling in the form of mousses or gels," with the aid of a stabilizer compound, is not enough to establish a *prima facie* showing of obviousness in combination with Dupuis I and Emmons. As discussed above, the Examiner has not shown that Dupuis I and Emmons contain the requisite motivation for their combination. Neither Dupuis I nor Emmons contain the stabilizer compound of Hüglin. Likewise, Hüglin, which the Examiner has admitted does not disclose or discuss a composition similar to the one in Dupuis I, does not provide any motivation for one of ordinary skill in the art to attempt to convert the mousse composition taught by Dupuis I into a gel as presently claimed. See *In re Zurko* 258 F.3d 1379, 1386, 59 U.S.P.Q.2d 1693, 1696 (Fed. Cir. 2001) (holding that unless "substantial evidence" found in the record supports the factual determinations central to the issue of patentability, a rejection over a combination of

references is improper and should be withdrawn). Accordingly, this rejection should be withdrawn.

#### 3. Claim 24 and Prencipe

The Examiner also rejects claim 24 over Dupuis I in view of Emmons, Hüglin, and Prencipe for the reasons set forth in the May 20, 2003, Office Action at 6.

Specifically, with respect to claim 24, the Examiner notes that the combination of Dupuis I, Emmons, and Hüglin lacks styrene phosphonic acids and vinyl phosphonic acids.

The Examiner relies on Prencipe because "[s]tyrene phosphonic acids and vinyl phosphonic acid units are disclosed as comprising a cross-linking polymeric thickening agent." May 20, 2003, Office Action at 6. Again, the Examiner fails to make a prima facie showing of obviousness with this proposed combination.

Appellant has argued that there is no motivation to use any teaching from Prencipe, which teaches linearly viscoelastic cross-linked thickening agents, to arrive at the present invention, which is based on associative polyurethane thickening agents. One of ordinary skill in the art would know that thickening via cross-linked thickening agents involves covalent bonding, whereas associative polymers are "capable of reversibly associating with each other or with other molecules or particles."

Specification at 1. The fact that Prencipe may teach a hair composition in gel form is not enough motivation for one to seek out, let alone apply, its teachings, when the chemistry of the composition is so different from the claimed invention. As noted in the present specification, "[t]he thickening and/or gelation of aqueous media with polymers

has been an important subject of cosmetic research for a long time." Page 1, lines 9-11.

In response to those arguments, the Examiner states that "Dupuis [I] teaches phosphonic acids as anionic polymers in [the] invention and that Prencipe is merely relied upon to teach specific phosphonic acids that are utilized in hair care formulations." Final Office Action at 5. The Examiner further stated that she "has not even relied upon the gel form of Prencipe as motivation to combine the references." *Id.* Rather, the Examiner asserts that "Prencipe and Dupuis are both directed to hair styling formulations. Thus, one of skill in the art would be motivated to teach the phosphonic acids of Dupuis as the specific phosphonic acids taught by Prencipe because of the expectation of achieving additional thickening properties and viscoelasticity of the hair care product." *Id.* 

Appellant continues to disagree for the reasons of record. That is, Prencipe, which teaches linearly viscoelastic cross-linked thickening agents, and the present invention, which is based on associative polyurethane thickening agents, use two chemically different thickening systems. Thus there is no reasonable expectation of success, and no motivation, to use any teaching from Prencipe to obtain the presently claimed invention.

Moreover, Prencipe does not remedy the deficiencies of Dupuis I alone, or in combination with Emmons and Hüglin. Accordingly, the mention of specific phosphonic acids, which are known, without a concomitant suggestion or motivation to combine or

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modify the compositions of Dupuis I, does not render the pending claims obvious. See,

e.g., M.P.E.P. § 2142. Accordingly, this rejection should be withdrawn.

IX. Conclusion

For the reasons given above, pending claims 16-37 are patentable over the cited

prior art. The Board of Patent Appeals and Interferences should therefore reverse or

dismiss the outstanding rejections and allow claims 16-37.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain

entry of this Appeal Brief, such extension is hereby respectfully requested. If there are

any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith,

including any fees required for an extension of time under 37 C.F.R. § 1.136, please

charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: October 7, 2004

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#### Appendix to Appeal Brief Filed October 7, 2004

Rejected claims 16-37:

- 16. (Previously presented) A cosmetic composition comprising, in a cosmetically acceptable medium,
- (A) at least one nonionic amphiphilic associative polyurethane corresponding to formula (I):

in which

one of the radicals  $R_1$  and  $R_2$  is an alkyl group having 8 to 18 carbons and the other group is an alkyl group having 1 to 6 carbons,

 $R_3$  is a hydrocarbon radical having from 4 to 36 carbons,  $R_4$  is chosen from hydrogen and  $C_1\text{-}C_6$  alkyl radicals,

a ranges, independently, from 90 to 600, and

b ranges from 1 to 4, and

(B) at least one anionic polymer comprising at least one fatty-chain monomer unit,

wherein the composition is in the form of a gel.

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- 17. (Previously presented) The composition according claim 16, wherein  $R_3$  has from 6 to 10 carbons.
- 18. (Previously presented) The composition according claim 16, wherein  $R_4$  is a hydrogen atom.
- 19. (Previously presented) The composition according to claim 16, wherein the alkyl group having from 8 to 18 carbons is an octadecyl group and the alkyl group having from 1 to 6 carbons is a methyl group.
- 20. (Previously presented) The composition according to claim 19, wherein the at least one nonionic amphiphilic associative polyurethane of formula (I) having the octadecyl group and the methyl group is obtained by polycondensation of hexamethylene diisocyanate and polyethylene glycol.
- 21. (Previously presented) The composition according to claim 16, wherein the at least one nonionic amphiphilic associative polyurethane of formula (I) is in a solution or suspension in water, which also contains a starch modified to be water soluble, wherein said modification is carried out chemically, enzymatically, or microbiologically.
- 22. (Previously presented) The composition according to claim 16, wherein the at least one anionic polymer comprising at least one fatty-chain monomer unit comprises at least one unit chosen from carboxylic acids, phosphonic acids, sulphonic acids and derivatives thereof.

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- 23. (Previously presented) The composition according to claim 22, wherein the carboxylic acids are chosen from acrylic acids, methacrylic acids, crotonic acids, maleic acids, fumaric acids and itaconic acids.
- 24. (Previously presented) The composition according to claim 22, wherein the phosphonic acids are chosen from vinylphosphonic acid and styrenephosphonic acid.
- 25. (Previously presented) The composition according to claim 22, wherein the sulphonic acids are chosen from vinylsulphonic acid and styrenesulphonic acid.
- 26. (Previously presented) The composition according to claim 16, wherein the at least one anionic polymer comprises at least one fatty chain chosen from monomers comprising at least one linear or branched C<sub>8</sub>-C<sub>22</sub> alkyl chain and derivatives thereof.
- 27. (Previously presented) The composition according to claim 26, wherein the at least one linear or branched  $C_8$ - $C_{22}$  alkyl chain is chosen from  $C_8$ - $C_{22}$  alkyl acrylates or methacrylates, and vinyl esters of  $C_8$ - $C_{22}$  fatty acids.
- 28. (Previously presented) The composition according to claim 16, wherein the at least one anionic polymer comprising at least one unit chosen from a fatty-chain monomer also contains at least one nonionic unit.
- 29. (Previously presented) The composition according to Claim 28, wherein the at least one nonionic unit is chosen from monomers chosen from vinyl monomers, olefinic monomers, styrene monomers, acrylic monomers, methacrylic monomers and derivatives thereof.

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30. (Previously presented) The composition according to claim 16, wherein

the at least one nonionic amphiphilic associative polyurethane of formula (I) is present

in an amount of from 0.1 to 10% by weight relative to the total weight of the

composition.

31. (Previously presented) The composition according to claim 30, wherein

the at least one nonionic amphiphilic associative polyurethane of formula (I) is present

in an amount of from 0.5 to 5% by weight relative to the total weight of the composition.

32. (Previously presented) The composition according to claim 16, wherein

the at least one anionic polymer comprising at least one unit derived from a fatty-chain

monomer is present in an amount of from 0.01 to 10% by weight relative to the total

weight of the composition.

33. (Previously presented) The composition according to claim 32, wherein

the at least one anionic polymer comprising at least one fatty-chain monomer unit is

present in an amount of from 0.1 to 5% by weight relative to the total weight of the

composition.

34. (Previously presented) The composition according to claim 16, wherein

the weight ratio of the nonionic amphiphilic associative polyurethane of formula (I) and

the anionic polymer comprising at least one fatty-chain monomer unit ranges from about

90/10 to 10/90.

35. (Previously presented) A leave-in haircare gel or styling gel comprising, in

a cosmetically acceptable medium:

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(A) at least one nonionic amphiphilic associative polyurethane corresponding to formula (I):

in which

one of the radicals  $R_1$  and  $R_2$  is an alkyl group having 8 to 18 carbons and the other group is an alkyl group having 1 to 6 carbons,

R<sub>3</sub> is a hydrocarbon radical having from 4 to 36 carbons,

R<sub>4</sub> is chosen from hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl radicals,

a ranges, independently, from 90 to 600, and

b ranges from 1 to 4, and

(B) at least one anionic polymer comprising at least one fatty-chain monomer unit.

wherein the leave-in haircare gel or styling gel is in the form of a gel.

- 36. (Previously presented) A process of thickening a cosmetic composition comprising adding to said composition:
- (A) at least one nonionic amphiphilic associative polyurethane corresponding to formula (I):

in which

one of the radicals  $R_1$  and  $R_2$  is an alkyl group having 8 to 18 carbons and the other group is an alkyl group having 1 to 6 carbons,

R<sub>3</sub> is a hydrocarbon radical having from 4 to 36 carbons,

R<sub>4</sub> is a hydrogen atom or a C<sub>1</sub>-C<sub>6</sub> alkyl radical,

a ranges, independently, from 90 to 600, and

b is from 1 to 4, and

(B) at least one anionic polymer comprising at least one fatty-chain monomer unit

wherein (A) and (B) are added in a combined amount effective to thicken said composition, and

wherein the composition is in the form of a gel.

- 37. (Previously presented) A process for treating hair comprising applying to said hair composition comprising, in a cosmetically acceptable medium:
- (A) at least one nonionic amphiphilic associative polyurethane corresponding to formula (I):

#### in which

one of the radicals  $R_1$  and  $R_2$  is an alkyl group having 8 to 18 carbons and the other group is an alkyl group having 1 to 6 carbons,

 $R_3$  is a hydrocarbon radical having from 4 to 36 carbons,  $R_4$  is chosen from hydrogen and  $C_1$ - $C_6$  alkyl radicals, a ranges, independently, from 90 to 600, and b ranges from 1 to 4, and

(B) at least one anionic polymer comprising at least one fatty-chain monomer unit

and drying the hair without rinsing said composition from the hair, wherein the composition is in the form of a gel.

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### **EVIDENCE APPENDIX**

None.

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### **RELATED PROCEEDINGS APPENDIX**

None.